## <u>AMENDMENTS TO THE SPECIFICATION</u>

Please amend the below-numbered paragraphs of the specification according to the revisions shown below:

[0001] The present invention is related to U.S. Serial No. <u>10/727,453</u> [[_____]] entitled<u>, "Method of Optimizing Production of Gas from Subterranean Formations"</u> [[_____]] filed on even date herewith, which is assigned to the assignee of the present invention.

[0028] Use of a fracturing technique may provide for an advantage over prior art methods that use drilling alone. Drilling takes much more time and can be much more expensive than fracturing. If the fractures are spaced to maximize interference, they can provide adequate coverage of coal seams without drilling more substantially horizontal well bores. The suitable number, placement and size of fractures for a particular well bore are determined in part by the geomechanical stresses present in the formation. Pending application U.S. Serial ~~Number~~ <u>No. 10/728,295</u> [[_______________]], titled "Methods for Geomechanical Fracture Modeling," assigned to the same assignee of this patent, discloses a method for designing and optimizing the number, placement, and size of fractures in a subterranean formation. The inventors of the present invention incorporate the disclosure of that application herein. The number of fractures that form the plurality of fractures 500, their spacing and their configuration will depend on several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to persons of ordinary skill in the art having the benefit of the present disclosure and the disclosure of the application for "Methods for Geomechanical Fracture Modeling" incorporated herein.

[0031] In the exemplary embodiment shown in Figure 3, two substantially vertical well bores 101 and 102 support two substantially horizontal well bores 603 and 604, and 605 and 606, respectively. The substantially horizontal well bores 603, 604, 605, and 606 are parallel. This parallel configuration can allow for peak interference along the length of the substantially horizontal well bores to be reached within one to four years. Accordingly, gas production can be maximized within a feasible economic time frame. The plurality of fractures 700 should be spaced such that the interference between neighboring fractures is maximized. The number, spacing and configuration of substantially vertical well bores and substantially horizontal well bores necessary in the pattern will depend on several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to a person of ordinary skill in the art having the benefit of this disclosure. The number of fractures that form the plurality of fractures 700, their spacing and their configuration will depend on similar factors and will be apparent to persons of ordinary skill in the art having the benefit of the present disclosure and the disclosure of the pending application U.S. Serial No. 10/728,295 [[________________]], titled "Methods for Geomechanical Fracture Modeling," incorporated herein.

[0033] Substantially horizontal well bores 801, 802, 803, 804, 805, and 806 form the plurality of substantially horizontal well bores 800 and are disposed substantially within the coal seam. A plurality of fractures 900 is distributed along each of the substantially horizontal well bores 801 through 806. While Figure 4 may illustrate six substantially horizontal well bores, the number of substantially horizontal well bores that form the plurality is not limited to six. Instead, any number of substantially horizontal well bores may be used as determined by several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to persons of ordinary skill in the art. Alternatively, in an exemplary embodiment, only one fork pattern may be necessary. That is, only the substantially horizontal well bores on one side of Figure 4, such as 801, 802, and 803, may be required. Again, the configuration will depend on several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to a person of ordinary skill in the art having the benefit of this disclosure. Similarly, any number of fractures may form the plurality of fractures 900 distributed along each of the substantially horizontal well bores. A suitable number of substantially horizontal well bores and fractures will depend on several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to persons of ordinary skill in the art having the benefit of this disclosure and the benefit of the disclosure of pending application U.S. Serial No. 10/728,295 [[_______________]], titled "Methods for Geomechanical Fracture Modeling," incorporated herein.

[0034] Each substantially horizontal well bore 801, 802, 803, 804, 805, and 806 of the exemplary embodiment shown in Figure 4 is parallel to the other substantially horizontal well bores that form the plurality. In a certain preferred embodiment, the plurality of substantially horizontal well bores 800 is spaced to maximize interference between the substantially horizontal well bores 801, 802, 803, 804, 805, and 806. Maximizing interference maximizes gas production by reducing reservoir pressure in the coal seam across a large area. By spacing the substantially horizontal well bores to maximize interference, fewer substantially horizontal well bores are needed to cover properly drain a coal seam than prior art methods that do not maximize interference require. The pattern of opposed forks allows for maximum interference between wells without distributing a large number of substantially vertical well bores widely over the coal seam. The surface area disturbed by substantially vertical well bores in the pattern of opposed forks is therefore minimized, and the cost and impact on the surface are accordingly minimized. The plurality of fractures may be spaced to maximize interference between neighboring fractures. Again, the proper spacing of the substantially horizontal well bores and fractures will be apparent to persons of ordinary skill in the art having the benefit of this disclosure and the benefit of the disclosure of pending application U.S. Serial No. 10/728,295 [[______________]], titled "Methods for Geomechanical Fracture Modeling," incorporated herein.

[0035] Figure 5 depicts a top view of a pattern used in an exemplary embodiment of the present invention. In this configuration, the plurality of substantially horizontal well bores, denoted generally by the numeral 1000, exit radially from at least one substantially vertical well bore. Substantially horizontal well bores 1001, 1002, 1003, 1004, 1005, and 1006 form the plurality of substantially horizontal well bores 1000. A plurality of fractures 900 are disposed along each of the substantially horizontal well bores 1001, 1002, 1003, 1004, 1005, and 1006. A radial pattern forming a semi-circle may be sufficient to drain a particular site. Therefore, in one exemplary embodiment, only substantially horizontal well bores 1001, 1002 and 1003 are used. As with the fork pattern, the proper number and configuration of substantially horizontal well bores and fractures will depend on several factors, including, but not limited to, the characteristics and limitations of the site, subterranean formation, and coal seam and will be apparent to persons of ordinary skill in the art having the benefit of this disclosure and the benefit of the disclosure of pending application U.S. Serial No. 10/728,295

[[_______________]], titled "Methods for Geomechanical Fracture Modeling," incorporated herein.